



1

SEQUENCE LISTING

<110> Gaiger, Alexander  
Cheever, Martin A.

<120> COMPOSITIONS AND METHODS FOR WT1 SPECIFIC IMMUNOTHERAPY

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<140> US 09/164,223

<141> 1998-09-30

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<170> PatentIn Ver. 2.0

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<400> 276  
Lys Arg Tyr Phe Lys Leu Ser His Leu  
1 5

<210> 277  
<211> 9  
<212> PRT  
<213> Mus musculus

<400> 277  
Lys Thr Ser Glu Lys Pro Phe Ser Cys  
1 5

<210> 278  
<211> 9  
<212> PRT  
<213> Mus musculus

<400> 278  
Leu Glu Cys Met Thr Trp Asn Gln Met  
1 5

<210> 279  
<211> 9  
<212> PRT  
<213> Mus musculus

<400> 279

Leu Gly Gly Gly Gly Gly Cys Gly Leu  
1 5

<210> 280  
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<212> PRT  
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<400> 280  
Leu Gln Met His Ser Arg Lys His Thr  
1 5

<210> 281  
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<400> 281  
Met His Gln Arg Asn Met Thr Lys Leu  
1 5

<210> 282  
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<400> 282  
Asn Ala Pro Tyr Leu Pro Ser Cys Leu  
1 5

<210> 283  
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<400> 283  
Asn Leu Gly Ala Thr Leu Lys Gly Met  
1 5

<210> 284  
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<400> 284  
Asn Leu Tyr Gln Met Thr Ser Gln Leu  
1 5

<210> 285

<211> 9  
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<400> 285  
Asn Met Thr Lys Leu His Val Ala Leu  
1 5

<210> 286  
<211> 9  
<212> PRT  
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<400> 286  
Asn Gln Met Asn Leu Gly Ala Thr Leu  
1 5

<210> 287  
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<212> PRT  
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<400> 287  
Pro Gly Ala Ser Ala Tyr Gly Ser Leu  
1 5

<210> 288  
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<400> 288  
Gln Ala Ser Ser Gly Gln Ala Arg Met  
1 5

<210> 289  
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<400> 289  
Gln Met Thr Ser Gln Leu Glu Cys Met  
1 5

<210> 290  
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<212> PRT  
<213> Mus musculus

<400> 290

Gln Gln Tyr Ser Val Pro Pro Pro Val  
1 5

<210> 291  
<211> 9  
<212> PRT  
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<400> 291  
Gln Tyr Arg Ile His Thr His Gly Val  
1 5

<210> 292  
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<212> PRT  
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<400> 292  
Gln Tyr Ser Val Pro Pro Pro Val Tyr  
1 5

<210> 293  
<211> 9  
<212> PRT  
<213> Mus musculus

<400> 293  
Arg Met Phe Pro Asn Ala Pro Tyr Leu  
1 5

<210> 294  
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<212> PRT  
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<400> 294  
Arg Thr Pro Tyr Ser Ser Asp Asn Leu  
1 5

<210> 295  
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<212> PRT  
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<400> 295  
Arg Val Ser Gly Val Ala Pro Thr Leu  
1 5

<210> 296

<211> 9  
<212> PRT  
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<400> 296  
Ser Cys Leu Glu Ser Gln Pro Thr Ile  
1 5

<210> 297  
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<400> 297  
Ser Cys Gln Lys Lys Phe Ala Arg Ser  
1 5

<210> 298  
<211> 9  
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<400> 298  
Ser Asp Val Arg Asp Leu Asn Ala Leu  
1 5

<210> 299  
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<400> 299  
Ser Leu Gly Glu Gln Gln Tyr Ser Val  
1 5

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<400> 300  
Thr Cys Gln Arg Lys Phe Ser Arg Ser  
1 5

<210> 301  
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<400> 301



Thr Glu Gly Gln Ser Asn His Gly Ile  
1 5

<210> 302  
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<400> 302  
Thr Leu His Phe Ser Gly Gln Phe Thr  
1 5

<210> 303  
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<400> 303  
Thr Leu Val Arg Ser Ala Ser Glu Thr  
1 5

<210> 304  
<211> 9  
<212> PRT  
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<400> 304  
Val Leu Asp Phe Ala Pro Pro Gly Ala  
1 5

<210> 305  
<211> 9  
<212> PRT  
<213> Mus musculus

<400> 305  
Trp Asn Gln Met Asn Leu Gly Ala Thr  
1 5

<210> 306  
<211> 9  
<212> PRT  
<213> Mus musculus

<400> 306  
Tyr Phe Lys Leu Ser His Leu Gln Met  
1 5

<210> 307

<211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 307  
 Tyr Gln Met Thr Ser Gln Leu Glu Cys  
           1                  5

<210> 308  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 308  
 Tyr Ser Ser Asp Asn Leu Tyr Gln Met  
           1                  5

<210> 309  
 <211> 6  
 <212> PRT  
 <213> Homo sapiens

<400> 309  
 Gly Ala Ala Gln Trp Ala  
           1                  5

<210> 310  
 <211> 12  
 <212> PRT  
 <213> Homo sapiens

<400> 310  
 Ala Ser Ala Tyr Gly Ser Leu Gly Gly Pro Ala Pro  
           1                  5                  10

<210> 311  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 311  
 Ala Phe Thr Val His Phe Ser Gly Gln Phe Thr Gly Thr Ala Gly  
           1                  5                  10                  15

<210> 312  
 <211> 5  
 <212> PRT

<213> Homo sapiens

<400> 312

His Ala Ala Gln Phe  
1 5

<210> 313

<211> 32

<212> PRT

<213> Homo sapiens

<400> 313

Cys His Thr Pro Thr Asp Ser Cys Thr Gly Ser Gln Ala Leu Leu Leu  
1 5 10 15

Arg Thr Pro Tyr Ser Ser Asp Asn Leu Tyr Gln Met Thr Ser Gln Leu  
20 25 30

<210> 314

<211> 32

<212> PRT

<213> Homo sapiens

<400> 314

Arg Ile His Thr His Gly Val Phe Arg Gly Ile Gln Asp Val Arg Arg  
1 5 10 15

Val Pro Gly Val Ala Pro Thr Leu Val Arg Ser Ala Ser Glu Thr Ser  
20 25 30

<210> 315

<211> 4

<212> PRT

<213> Homo sapiens

<400> 315

Arg Tyr Phe Lys  
1

<210> 316

<211> 14

<212> PRT  
 <213> Homo sapiens

<400> 316  
 Glu Arg Arg Phe Ser Arg Ser Asp Gln Leu Lys Arg His Gln  
 1 5 10

<210> 317  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 317  
 Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr His Thr Arg Thr  
 1 5 10 15

His Thr Gly Lys Thr Ser  
 20

<210> 318  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

<400> 318  
 Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val Arg His His Asn  
 1 5 10 15

Met His Gln Arg Asn  
 20

<210> 319  
 <211> 449  
 <212> PRT  
 <213> Homo sapiens

<400> 319  
 Met Gly Ser Asp Val Arg Asp Leu Asn Ala Leu Leu Pro Ala Val Pro  
 1 5 10 15

Ser Leu Gly Gly Gly Gly Gly Cys Ala Leu Pro Val Ser Gly Ala Ala  
 20 25 30

Gln Trp Ala Pro Val Leu Asp Phe Ala Pro Pro Gly Ala Ser Ala Tyr  
 35 40 45

Gly Ser Leu Gly Gly Pro Ala Pro Pro Pro Ala Pro Pro Pro Pro Pro  
 50 55 60

Pro Pro Pro Pro His Ser Phe Ile Lys Gln Glu Pro Ser Trp Gly Gly  
 65 70 75 80  
 Ala Glu Pro His Glu Glu Gln Cys Leu Ser Ala Phe Thr Val His Phe  
 85 90 95  
 Ser Gly Gln Phe Thr Gly Thr Ala Gly Ala Cys Arg Tyr Gly Pro Phe  
 100 105 110  
 Gly Pro Pro Pro Pro Ser Gln Ala Ser Ser Gly Gln Ala Arg Met Phe  
 115 120 125  
 Pro Asn Ala Pro Tyr Leu Pro Ser Cys Leu Glu Ser Gln Pro Ala Ile  
 130 135 140  
 Arg Asn Gln Gly Tyr Ser Thr Val Thr Phe Asp Gly Thr Pro Ser Tyr  
 145 150 155 160  
 Gly His Thr Pro Ser His His Ala Ala Gln Phe Pro Asn His Ser Phe  
 165 170 175  
 Lys His Glu Asp Pro Met Gly Gln Gln Gly Ser Leu Gly Glu Gln Gln  
 180 185 190  
 Tyr Ser Val Pro Pro Pro Val Tyr Gly Cys His Thr Pro Thr Asp Ser  
 195 200 205  
 Cys Thr Gly Ser Gln Ala Leu Leu Leu Arg Thr Pro Tyr Ser Ser Asp  
 210 215 220  
 Asn Leu Tyr Gln Met Thr Ser Gln Leu Glu Cys Met Thr Trp Asn Gln  
 225 230 235 240  
 Met Asn Leu Gly Ala Thr Leu Lys Gly Val Ala Ala Gly Ser Ser Ser  
 245 250 255  
 Ser Val Lys Trp Thr Glu Gly Gln Ser Asn His Ser Thr Gly Tyr Glu  
 260 265 270  
 Ser Asp Asn His Thr Thr Pro Ile Leu Cys Gly Ala Gln Tyr Arg Ile  
 275 280 285  
 His Thr His Gly Val Phe Arg Gly Ile Gln Asp Val Arg Arg Val Pro  
 290 295 300  
 Gly Val Ala Pro Thr Leu Val Arg Ser Ala Ser Glu Thr Ser Glu Lys  
 305 310 315 320  
 Arg Pro Phe Met Cys Ala Tyr Pro Gly Cys Asn Lys Arg Tyr Phe Lys  
 325 330 335

Leu Ser His Leu Gln Met His Ser Arg Lys His Thr Gly Glu Lys Pro  
 340 345 350

Tyr Gln Cys Asp Phe Lys Asp Cys Glu Arg Arg Phe Ser Arg Ser Asp  
 355 360 365

Gln Leu Lys Arg His Gln Arg Arg His Thr Gly Val Lys Pro Phe Gln  
 370 375 380

Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr  
 385 390 395 400

His Thr Arg Thr His Thr Gly Lys Thr Ser Glu Lys Pro Phe Ser Cys  
 405 410 415

Arg Trp Pro Ser Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val  
 420 425 430

Arg His His Asn Met His Gln Arg Asn Met Thr Lys Leu Gln Leu Ala  
 435 440 445

Leu

<210> 320

<211> 449

<212> PRT

<213> Mus musculus

<400> 320

Met Gly Ser Asp Val Arg Asp Leu Asn Ala Leu Leu Pro Ala Val Ser  
 1 5 10 15

Ser Leu Gly Gly Gly Gly Gly Cys Gly Leu Pro Val Ser Gly Ala Ala  
 20 25 30

Gln Trp Ala Pro Val Leu Asp Phe Ala Pro Pro Gly Ala Ser Ala Tyr  
 35 40 45

Gly Ser Leu Gly Gly Pro Ala Pro Pro Pro Ala Pro Pro Pro Pro  
 50 55 60

Pro Pro Pro Pro His Ser Phe Ile Lys Gln Glu Pro Ser Trp Gly Gly  
 65 70 75 80

Ala Glu Pro His Glu Glu Gln Cys Leu Ser Ala Phe Thr Leu His Phe  
 85 90 95

Ser Gly Gln Phe Thr Gly Thr Ala Gly Ala Cys Arg Tyr Gly Pro Phe

100 105 110  
 Gly Pro Pro Pro Pro Ser Gln Ala Ser Ser Gly Gln Ala Arg Met Phe  
 115 120 125  
 Pro Asn Ala Pro Tyr Leu Pro Ser Cys Leu Glu Ser Gln Pro Thr Ile  
 130 135 140  
 Arg Asn Gln Gly Tyr Ser Thr Val Thr Phe Asp Gly Ala Pro Ser Tyr  
 145 150 155 160  
 Gly His Thr Pro Ser His His Ala Ala Gln Phe Pro Asn His Ser Phe  
 165 170 175  
 Lys His Glu Asp Pro Met Gly Gln Gln Gly Ser Leu Gly Glu Gln Gln  
 180 185 190  
 Tyr Ser Val Pro Pro Pro Val Tyr Gly Cys His Thr Pro Thr Asp Ser  
 195 200 205  
 Cys Thr Gly Ser Gln Ala Leu Leu Leu Arg Thr Pro Tyr Ser Ser Asp  
 210 215 220  
 Asn Leu Tyr Gln Met Thr Ser Gln Leu Glu Cys Met Thr Trp Asn Gln  
 225 230 235 240  
 Met Asn Leu Gly Ala Thr Leu Lys Gly Met Ala Ala Gly Ser Ser Ser  
 245 250 255  
 Ser Val Lys Trp Thr Glu Gly Gln Ser Asn His Gly Ile Gly Tyr Glu  
 260 265 270  
 Ser Asp Asn His Thr Ala Pro Ile Leu Cys Gly Ala Gln Tyr Arg Ile  
 275 280 285  
 His Thr His Gly Val Phe Arg Gly Ile Gln Asp Val Arg Arg Val Ser  
 290 295 300  
 Gly Val Ala Pro Thr Leu Val Arg Ser Ala Ser Glu Thr Ser Glu Lys  
 305 310 315 320  
 Arg Pro Phe Met Cys Ala Tyr Pro Gly Cys Asn Lys Arg Tyr Phe Lys  
 325 330 335  
 Leu Ser His Leu Gln Met His Ser Arg Lys His Thr Gly Glu Lys Pro  
 340 345 350  
 Tyr Gln Cys Asp Phe Lys Asp Cys Glu Arg Arg Phe Ser Arg Ser Asp  
 355 360 365  
 Gln Leu Lys Arg His Gln Arg Arg His Thr Gly Val Lys Pro Phe Gln

370

375

380

Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr  
 385 390 395 400

His Thr Arg Thr His Thr Gly Lys Thr Ser Glu Lys Pro Phe Ser Cys  
 405 410 415

Arg Trp His Ser Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val  
 420 425 430

Arg His His Asn Met His Gln Arg Asn Met Thr Lys Leu His Val Ala  
 435 440 445

Leu

*Al*  
*Cond*